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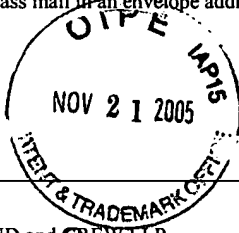
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

On November 18, 2005

TOWNSEND and TOWNSEND and CREW LLP

By: Sharyl Brown

Sharyl Brown



#10

PATENT

Docket No.: 16869P-023000US
Client Ref. No.: 21000119US1

RECEIVED

NOV 25 2005

OFFICE OF PETITIONS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HISAE SHIBUYA et al.

Application No.: 09/824,991

Filed: April 2, 2001

For: METHOD FOR EVALUATING
COLOR PICTURE TUBES AND
DEVICE FOR THE SAME AND
METHOD FOR MAKING COLOR
PICTURE TUBES

Examiner: Trang U. Tran

Art Unit: 2614

RENEWED PETITION
UNDER 37 CFR § 1.137(b)

Mail Stop Petitions

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

November 18, 2005

Sir:

This is Renewed Petition is being filed in response to the Decision on Petition, dated September 19, 2005, which dismissed the Petition filed on June 9, 2005. The Petition of June 9, 2005, was dismissed for failure to submit the Required Reply. The Required Reply, as noted in the Communication that was submitted with the Petition, was filed on January 2, 2004. The Required Reply, however, listed the wrong application number, i.e., Application Number 09/284,991, rather than 9/824,991. Enclosed herewith are the Petition, Communication, and other documents filed on June 9, 2005. Enclosed also are the Amendment and related documents filed on January 2, 2004, as well as a

New Amendment, which corresponds to the Amendment of January 2, 2004. Applicants respectfully request the Examiner to grant the Renewed Petition and allow the revival of this unintentionally abandoned application.

CONCLUSION

If the Petitions Attorney believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,



Steve Y. Cho
Reg. No. 44,612

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
SYC:km



TO THE U.S. PATENT AND TRADEMARK OFFICE:

Please stamp your date of receipt of the following documents and return this card to addressee:

Enclosed

- 1) SB/21 Transmittal Form (1 page)
- 2) SB/17 Fee Transmittal (in duplicate) (2 pages)
- 3) Communication (2 pages)
- 4) SB/64 Petition For Revival of An Application For Patent
Abandoned Unintentionally Under 37 CFR 1.137(b) (2 pages)
- 5) Return Post Card

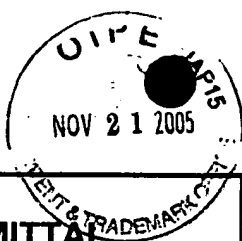
Application No.: 09/824,991
Atty Docket No.: 16869P-023000US
Date Due: July 18, 2005
Date Mailed: June 6, 2005
Atty/Secy: SYC/km

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OFFICE OF PETITIONS

60505059 v1



PTO/SB/21 (09-04)

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

8

Application Number

09/824,991

Filing Date

April 2, 2001

First Named Inventor

Shibuya, Hisae

Art Unit

2614

Examiner Name

Trang U. Tran

Attorney Docket Number

16869P-023000US

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OFFICE OF PETITIONS**ENCLOSURES (Check all that apply)**

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a
Provisional ApplicationPower of Attorney, Revocation
Change of Correspondence Address

Terminal Disclaimer



Request for Refund



CD, Number of CD(s) _____



Landscape Table on CD



After Allowance Communication to TC

Appeal Communication to Board
of Appeals and InterferencesAppeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify
below):

Communication, Return Postcard

Certified Copy of Priority
Document(s)Reply to Missing Parts/ Incomplete
ApplicationReply to Missing Parts
under 37 CFR 1.52 or 1.53

Remarks

The Commissioner is authorized to charge any additional fees to Deposit
Account 20-1430.**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

Townsend and Townsend and Crew LLP

Signature

Printed name

Steve Y. Cho

Date

June 6, 2005

Reg. No.

44,612

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop: Petitions, Office of Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature

Typed or printed name

Krista K. Merrimac

Date

June 6, 2005

NOV 21 2005

PTO/SB/17 (12-04)

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818)

FEE TRANSMITTAL

For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,500.00)

Complete If Known

Application Number 09/824,991
Filing Date April 2, 2001
First Named Inventor Shibuya, Hisae
Examiner Name Trang U. Tran
Art Unit 2614
Attorney Docket No. 16869P-023000US

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NOV 25 2005

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____
☒ Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity	
	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
-20 or HP =	x	=				
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
-3 or HP =	x	=				

HP = highest number of total claims paid for, if greater than 20

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

4. OTHER FEE(S)


Non-English Specification, \$130 fee (no small entity discount)

Other: Petition Fee Under 37 CFR 1.17(m) for Petition For Revival of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b)

Fees Paid (\$)

1,500.00

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 44,612	Telephone 650-326-2400
Name (Print/Type)	Steve Y. Cho		Date June 6, 2005

NOV 21 2005

PTO/SB/17 (12-04)

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (P.L. 109-171)

FEE TRANSMITTAL

For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,500.00)

Complete If Known

Application Number 09/824,991
Filing Date April 2, 2001
First Named Inventor Shibuya, Hisae
Examiner Name Trang U. Tran
Art Unit 2614
Attorney Docket No. 16869P-023000US

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OFFICE OF PETITIONS

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account - Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity		Small Entity		Small Entity		
	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity	
	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
-20 or HP =	x	=				
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
-3 or HP =	x	=				

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

4. OTHER FEE(S)

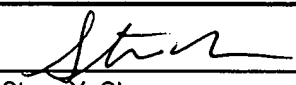
Non-English Specification, \$130 fee (no small entity discount)

Other: Petition Fee Under 37 CFR 1.17(m) for Petition For Revival of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b)

Fees Paid (\$)

1,500.00

SUBMITTED BY

Signature  Registration No. (Attorney/Agent) 44,612 Telephone 650-326-2400
Name (Print/Type) Steve Y. Cho Date June 6, 2005

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)**Docket Number (Optional)
16869P-023000US

First named inventor: Hisae Shibuya

Application No.: 09/824,991

Art Unit: 2614

Filed: April 2, 2001

Examiner: Trang U. Tran

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OFFICE OF PETITIONS

Title: METHOD FOR EVALUATING COLOR PICTURE TUBES AND DEVICE FOR THE SAME AND METHOD FOR MAKING COLOR PICTURE TUBES

Attention: Office of Petitions
Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
FAX: (703) 872-9306

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (703) 305-9282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus any extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee — required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee

- ☐ Small entity — fee \$ _____ (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.
- ☒ Other than small entity — fee \$ 1,500.00 (37 CFR 1.17(m))

2. Reply and/or fee

- A. The reply and/or fee to the above-noted Office action in the form of a Communication (identify type of reply):

- ☐ has been filed previously on _____.
- ☒ is enclosed herewith.

- B. The issue fee and publication fee (if applicable) of \$ _____.

- ☐ has been paid previously on _____.
- ☐ is enclosed herewith.

3. Terminal disclaimer with disclaimer fee

☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$_____ for a small entity or \$_____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D))].

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Signature

June 6, 2005
Date

Steve Y. Cho
Typed or printed name

44,612
Registration Number, if applicable

379 Lytton Avenue, Palo Alto, CA 94301
Address

(650) 326-2400
Telephone Number

Address

- Enclosures: ☒ Fee Payment
☒ Reply
☐ Terminal Disclaimer Form
☐ Additional sheets containing statements establishing unavoidable delay
☒ Other: Return Post Card

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

☒ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

June 6, 2005
Date


Signature

Krista K. Merrimac
Typed or printed name of person signing certificate

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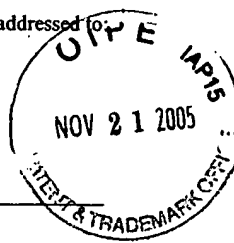
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PATENT
Docket No.: 16869P-023000US
Client Ref. No.: 21000119US1

On June 6, 2005

TOWNSEND and TOWNSEND AND CREW LLP

By: [Signature]



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HISAE SHIBUYA et al.

Application No.: 09/824,991

Filed: April 2, 2001

For: METHOD FOR EVALUATING
COLOR PICTURE TUBES AND
DEVICE FOR THE SAME AND
METHOD FOR MAKING COLOR
PICTURE TUBES

Examiner: Trang U. Tran

Art Unit: 2614

COMMUNICATION

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NOV 25 2005

OFFICE OF PETITIONS

Mail Stop: Petitions

Office of Petitions

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

June 6, 2005

Sir:

We received a Notice of Abandonment dated May 18, 2005 for the above-referenced patent application. As indicated, the Notice of Abandonment was received for Applicant's failure to timely file a proper reply to the Office letter mail on 02 October 2003. An Amendment was filed on January 2, 2004 in response to the October 2, 2003 Office Action. We note, however, that the Application Serial No. was listed incorrectly as 09/284,991 on the Amendment as filed. Therefore, Applicant's respectfully request revival of this unintentionally abandoned application.

Hisae Shibuya et al.
Application No.: 09/824,991
Page 2



PATENT

CONCLUSION

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

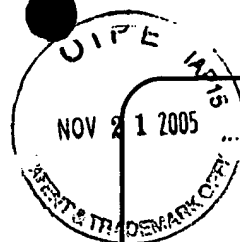
Respectfully submitted,

Steve Y. Cho
Reg. No. 44,612

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
SYC:km

D A C

PTO/SB/21 (09-04)



TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/824,991
Filing Date	April 2, 2001
First Named Inventor	Shibuya, Hisae
Art Unit	2614
Examiner Name	Trang U. Tran
Attorney Docket Number	16869P-023000US

RECEIVED

NOV 25 2005

OFFICE OF PETITIONS

ENCLOSURES (Check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input checked="" type="checkbox"/> Amendment/Reply
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input type="checkbox"/> Information Disclosure Statement

<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund
<input type="checkbox"/> CD, Number of CD(s) _____
<input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Renewed Petition
Copy of previously filed Amendment and accompanying documents
Copy of previously filed Petition For Revival and accompanying documents
Return Postcard |
|---|--|---|

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Steve Y. Cho		
Date	November 18, 2005	Reg. No.	44,612

CERTIFICATE OF TRANSMISSION/MAILING

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Signature

Typed or printed name

Sharyl Brown

Date

November 18, 2005



TO THE U.S. PATENT AND TRADEMARK OFFICE:

Please stamp your date of receipt of the following documents and return this card to addressee:

Attny. Docket No.: 16869P-023000US
Application No.: 09/284,991
Titled: Method for Evaluating Color Picture Tubes and Device for the
Same and Method for Making Color Picture Tubes
Inventor(s): Hisae Shibuya, et al.
Date Mailed: January 2, 2004
Atty/Secy: SYC:asb

Enclosed 1) Transmittal
 2) Amendment
 3) Return Postcard

60110564 v1

NOV 21 2005

PTO/SB/21 (08-03)

TRANSMITTAL FORM

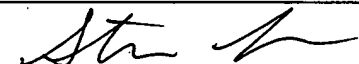
(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	09/284,991
		Filing Date	April 2, 2001
		First Named Inventor	Shibuya, Hisae
		Art Unit	2614
		Examiner Name	Trang U. Tran
Total Number of Pages in This Submission		Attorney Docket Number	16869P-023000US

ENCLOSURES (Check all that apply)

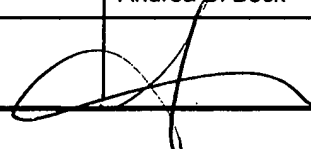
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard
Remarks: The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Townsend and Townsend and Crew LLP Steve Y. Cho	Reg. No. 44,612
Signature		
Date	1/2/04	

CERTIFICATE OF TRANSMISSION/MAILING

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Typed or printed name	Andrea S. Beck		
Signature		Date	1/2/04

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

PATENT
Attorney Docket No.: 16869P-023000US
Client Ref. No.: 21000119US1

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



On January 2, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: [Signature]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hisae Shibuya

Application No.: 09/284,991

Filed: April 2, 2001

For: METHOD FOR EVALUATING
COLOR PICTURE TUBES AND
DEVICE FOR THE SAME AND
METHOD FOR MAKING COLOR
PICTURE TUBES

Customer No.: 20350

Confirmation No.: 1340

Examiner: Trang U. Tran

Technology Center/Art Unit: 2614

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed October 2, 2003, please enter the following amendments and remarks:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 12 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A method for evaluating a color picture tube comprising:
displaying on a display surface of a color picture tube a measurement pattern including a plurality of first patterns arranged at different positions relative to fluophor dots of said color picture tube and a plurality of second patterns near said first patterns and sufficiently large relative to said fluophor dots;
obtaining a first image using an imaging element to image said displayed measurement pattern;
obtaining a second image using said imaging element to image while controlling light intake to allow brightness components of no more than about 1% of maximum luminance from said first image to be separated from noise and imaged;
creating a third image by combining said first image and said second image while adjusting scales according to a light intake ratio;
calculating, from said third image, display center positions of said plurality of first patterns using said second pattern positions;
measuring discrete fluophor emission intensity distributions for each of said plurality of first patterns; and
obtaining an electron beam intensity distribution by matching display center positions of said plurality of first patterns and combining said plurality of first patterns.
2. (Original) The method for evaluating a color picture tube as described in claim 1, wherein in said step for displaying said measurement pattern, there are at least a predetermined number of said first patterns or said line patterns or said dot patterns having phases, defined by a decimal fraction of a display pitch/fluophor pitch, within a predetermined range relative to a first pattern or a line pattern or a dot pattern serving as a reference.

3. (Original) The method for evaluating a color picture tube as described in claim 1, wherein in said step for displaying said measurement pattern, at least two of said second patterns are arranged horizontally or vertically, and in said step for obtaining said third image, a slope of a line connecting said at least two second patterns is calculated and rotational transformation is applied to said image so that said slope is 0.

4. (Original) The method for evaluating a color picture tube as described in claim 1, wherein in said step for obtaining said third image, a pitch of said fluophors contained in said second patterns is measured in image element units, and said fluophor pitch is used to calculate an image element size.

5. (Original) The method for evaluating a color picture tube as described in claim 1, wherein in said step for obtaining said third image, at least one position of said second patterns is detected from said first image and a corresponding second pattern position is detected from said second image, and an offset between said detected positions is used to detect an offset between said first image and said second image.

6. (Original) The method for evaluating a color picture tube as described in claim 1, wherein in said step for displaying said measurement pattern, said measurement pattern is displayed at a plurality of positions on said picture tube display surface, and a position recognition pattern is displayed close to each of said measurement patterns.

7. (Original) A method for evaluating a color picture tube, comprising:
displaying on a display surface of a color picture tube a measurement pattern formed from a plurality of basic patterns and auxiliary patterns;
obtaining a first image by imaging said displayed measurement pattern under a first light intake condition;
obtaining a second image by imaging said displayed measurement pattern under a second light intake condition;

obtaining a third image by combining said first image and said second image based on said first light intake condition and said second light intake condition;
determining a display center position of said basic pattern from said auxiliary pattern position information from said third image;
measuring discrete fluophor emission intensity distributions for each of said plurality of basic patterns; and
obtaining an electron beam intensity distribution by matching display center positions of said plurality of basic patterns for which discrete fluophor emission intensity distributions were calculated and combining said plurality of basic patterns; and
outputting information relating to said determined electron beam intensity distribution.

8. (Original) The method for evaluating a color picture tube as described in claim 7, wherein said second light intake condition is set so that, in said second image imaged under said second light intake conditions, images associated with areas having a brightness of no more than about 1% of a maximum luminance from said first image are distinguishable from noise.

9. (Original) The method for evaluating a color picture tube as described in claim 7, wherein, in said step for displaying a measurement pattern, said measurement pattern is displayed at a plurality of positions on said picture tube display surface, and a position recognition pattern is displayed close to each of said measurement patterns.

10. (Currently Amended) A method for evaluating a color picture tube, comprising:
displaying a measurement pattern on a display surface of a color picture tube;
obtaining a first image by imaging said displayed measurement pattern with an imaging element under a first light intake condition ~~using an of said~~ imaging element;
obtaining a second image by imaging said displayed measurement pattern with said imaging element under a second light intake condition ~~using of~~ said imaging element;

obtaining a third image having a wider dynamic range than images obtained through imaging with said imaging element by combining said first image and said second image;

measuring a discrete fluophor emission intensity distribution for said measurement pattern; and

obtaining an electron beam intensity distribution using said measured discrete fluophor emission intensity distribution and said calculated data for said plurality of basic patterns; and

outputting information relating to said determined electron beam intensity distribution.

11. (Original) The method for evaluating a color picture tube as described in claim 10, wherein in said step for displaying said measurement pattern, said measurement pattern is displayed at a plurality of positions on said picture tube display surface, and a position recognition pattern is displayed close to each of said measurement patterns.

12. (Original) The method for evaluating a color picture tube as described in claim 10, wherein said second light intake condition is set so that, in said second image imaged under said second light intake conditions, images associated with areas having a brightness of no more than about 1% of a maximum luminance from said first image are distinguishable from noise.

13. (Original) The method for evaluating a color picture tube as described in claim 10, wherein said third image with said wide dynamic range provides noise separation in a range of about 1% to about 100% of a maximum luminance of said image.

14. (Original) A device for evaluating a color picture tube, comprising:
a display generator to display on a display surface of a color picture tube a measurement pattern including a plurality of basic patterns arranged at different positions

relative to fluophor dots of said color picture tube and at least three auxiliary patterns near said basic patterns and sufficiently large relative to said fluophor dots;

an imager to obtain a first image using an imaging element to image said displayed measurement pattern and obtain a second image using said imaging element to image while controlling light intake to allow brightness components of no more than about 1% of maximum luminance from said first image to be separated from noise and imaged;

an image processor to create a third image by combining said first image and said second image while adjusting scales according to a light intake ratio;

a first calculating unit to calculate from said third image display created by said image processor a display center positions for each of said plurality of basic patterns using said auxiliary pattern positions;

a measuring unit to measure discrete fluophor emission intensity distributions for each of said plurality of basic patterns; and

a second calculating unit to obtain an electron beam intensity distribution by matching display center positions calculated by said first calculating unit and combining said plurality of basic patterns.

15. (Original) The device for evaluating color picture tubes as described in claim 14, wherein in said display generator, there are at least a predetermined number of said basic patterns or said line patterns or said dot patterns having phases, defined by a decimal fraction of a display pitch/fluophor pitch, within a predetermined range relative to a basic pattern or a line pattern or a dot pattern serving as a reference.

16. (Original) The device for evaluating color picture tubes as described in claim 14, wherein in said image processor, at least two of said auxiliary patterns are arranged horizontally or vertically and, in a step for obtaining said third image, a slope of a line connecting said at least two auxiliary patterns is calculated and rotational transformation is applied to said image so that said slope is 0.

17. (Original) The device for evaluating color picture tubes as described in claim 14, wherein said image processor measures a pitch of said fluophors contained in said auxiliary patterns in image element units, and said fluophor pitch is used to calculate an image element size.

18. (Original) The device for evaluating color picture tubes as described in claim 14, wherein said image processor detects at least one position of said auxiliary patterns from said first image and detects a corresponding auxiliary pattern position from said second image, and an offset between said detected positions is used to detect an offset between said first image and said second image.

19. (Original) The device for evaluating color picture tubes as described in claim 14, wherein said image processor displays said measurement pattern at a plurality of positions on said picture tube display surface, and displays a position recognition pattern close to each of said measurement patterns.

20. (Original) A device for evaluating a color picture tube, comprising:
a displaying unit to display a measurement pattern, including a basic pattern and an auxiliary pattern, on a display surface of a color picture tube;

an imaging unit to obtain a first image by imaging said displayed measurement pattern under a first light intake condition using an imaging element and obtaining a second image by imaging said displayed measurement pattern under a second light intake condition using said imaging element;

a processing unit to create a third image by combining said first image and said second image obtained from said imaging unit based on said first light intake condition and said second light intake condition;

a first calculating unit to determine a display center position of said basic pattern from said auxiliary pattern position information from said third image created by said processing unit;

a measuring unit to measure discrete fluophor emission intensity distributions for each of said plurality of basic patterns; and

a second calculating unit to determine an electron beam intensity distribution by using display center position data calculated by said first calculating unit and combining said discrete fluophor emission intensity distributions measured for each of said basic patterns by said measuring unit; and

an outputting unit to output information relating to said determined electron beam intensity distribution.

21. (Original) The device for evaluating a color picture tube as described in claim 20, wherein said second light intake condition of said imaging unit is set so that, in said second image imaged under said second light intake conditions, images associated with areas having a brightness of no more than about 1% of a maximum luminance from said first image are distinguishable from noise.

22. (Original) The device for evaluating a color picture tube as described in claim 20, wherein said displaying unit displays said measurement pattern at a plurality of positions on said picture tube display surface, and a position recognition pattern is displayed close to each of said measurement patterns.

23. (Currently Amended) A device for evaluating a color picture tube, comprising:

pattern displaying means for ~~displaying patterns~~ displaying a measurement pattern on a display surface of a color picture tube;

imaging means for ~~imaging~~ obtaining a first image and a second image by imaging said displayed measurement pattern under a first light intake condition and a second light intake condition, the first image being obtained with an imaging element under said first light intake condition of said imaging element, the second image being obtained with said imaging element under said second light intake condition of said imaging element;

image generating means for generating ~~images creating~~ a third image having a wider dynamic range than images obtained through imaging with said imaging means by combining said first image and said second image obtained with said imaging means;

discrete fluophor emission intensity distribution measuring means for ~~measuring discrete fluophor emission intensity distribution~~ measuring discrete fluophor emission intensity distribution for said plurality of basic patterns; and

determining means for determining an intensity distribution of an electron beam beamed to said display surface of said color picture tube using discrete fluophor emission intensity distribution information measured by said discrete fluophor emission intensity distribution measuring means and information of said third image generated by said image generating means; and

outputting means for outputting information relating to said determined electron beam intensity distribution.

24. (Original) The device for evaluating a color picture tube as described in claim 23, wherein said pattern displaying means displays said measurement pattern at a plurality of positions on said picture tube display surface, and a position recognition pattern is displayed close to each of said measurement patterns.

25. (Original) The device for evaluating a color picture tube as described in claim 23, wherein said second light intake condition of said imaging means is set so that, in said second image imaged under said second light intake conditions, images associated with areas having a brightness of no more than about 1% of a maximum luminance from said first image are distinguishable from noise.

26. (Original) The device for evaluating a color picture tube as described in claim 23, wherein said third image generated by said image generating means provides noise separation in a range of about 1% to about 100% of a maximum luminance of said image.

27. (Currently Amended) A method for making color picture tubes, comprising:

assembling a plurality of electrodes using an electron gun assembly process;
using an electron gun sealing process, placing an electron gun assembled in said electron gun assembly process in a bulb, forming a vacuum, and sealing said bulb;

assembling a deflector yoke onto said bulb and performing inspection and adjustment of image quality using an image quality inspection/adjustment process, said bulb assembled with said deflector yoke being sent to a next process when said image quality inspection/adjustment process is passed successfully, wherein, said image quality inspection/adjustment process includes:

displaying a measurement pattern on a screen of said bulb assembled with said deflection yoke,

obtaining a first image by imaging said displayed measurement pattern ~~using with~~ an imaging element under a first light intake condition of said imaging element,

obtaining a second image by imaging said displayed measurement pattern ~~using with~~ said imaging element under a second light intake condition of said imaging element,

obtaining a third image with a wider dynamic range obtained by imaging with said imaging element by combining said first image and said second image,

using said third image to determine an intensity distribution of an electron beam beamed to said display surface of said bulb assembled with said deflection yoke, and

approving said inspection if said determined intensity distribution is within a predetermined range.

28. (Original) The method for making color picture tubes of 27, wherein if an irregularity is detected in quantitative evaluation of emission distribution in said image quality inspection/adjustment process, information relating to said irregularity is passed on to at least one of the following: said electron gun assembly process, said electron gun sealing process, and said image quality inspection/adjustment process.

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29. (Original) The method of claim 1, wherein said first patterns are basic patterns and said second patterns are auxiliary patterns.

30. (Original) The method of claim 29, wherein there are at least three auxiliary patterns.

REMARKS/ARGUMENTS

Claims 1-30 are pending. Claims 10, 23, and 27 have been amended. No new matter has been added.

Claims 10, 13, 23, and 26-28 were rejected under 35 U.S.C. § 102(e) as being anticipated by Nishikawa. Applicants respectfully traverse the rejection. Claim 10 is directed to a method for evaluating a color picture tube. The claim recites, among other features, "obtaining a first image by imaging said displayed measurement pattern with an imaging element under a first light intake condition of said imaging element; obtaining a second image by imaging said displayed measurement pattern with said imaging element under a second light intake condition of said imaging element..."

One of the features of the claimed invention relates to reducing loss of signal values. As explained in page 7 of the specification, the component with low signal values (i.e., darker components) are generally lost in noise and quantization errors. The above recited features are directed to measuring the minimum brightness in such a way to reduce such data loss. For example, a standard exposure image 701 is obtained by adjusting the light intake to prevent saturation at the maximum luminance value (page 7, lines 17-18). A long exposure image 702 of the same location is also obtained by extending exposure time to prevent the minimum brightness from being lost in noise (page 7, lines 18-20). These two images that are obtained using two different light intake conditions are combined to prevent losing lower signal values to the noise, quantization errors, or the like.

Nishikawa discloses an apparatus for measuring a profile of an electron beam of a CRT. The Examiner stated that the above features are disclosed in Fig. 8 and at col. 9:4 to col. 10:44. Applicants respectfully disagree.

Nishikawa discloses obtaining a plurality of images of a test pattern that is displayed on a screen by changing raster size. Nishikawa does not describe using different light intake conditions to obtain different images of a displayed pattern. That is, Nishikawa does not disclose "obtaining a first image by imaging said displayed measurement pattern with an imaging element under a first light intake condition of said imaging element; obtaining a second image by

imaging said displayed measurement pattern with said imaging element under a second light intake condition of said imaging element..." Claim 10 is allowable at least for the above reason.

Claim 23 recites, "imaging means for obtaining a first image and a second image by imaging said displayed measurement pattern under a first light intake condition and a second light intake condition, the first image being obtained with an imaging element under said first light intake condition of said imaging element, the second image being obtained with said imaging element under said second light intake condition of said imaging element..." Nishikawa does not disclose the above recited feature. Claim 23 is allowable at least for the reason set forth above.

Claim 27 recites, "obtaining a first image by imaging said displayed measurement pattern with an imaging element under a first light intake condition of said imaging element, obtaining a second image by imaging said displayed measurement pattern with said imaging element under a second light intake condition of said imaging element..." Nishikawa does not disclose the above recited features. Claim 27 is allowable at least for this reason.

Other claims depend from one of the above claims and are allowable at least for this reason.

Claims 12 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishikawa. Applicants respectfully traverse the rejection. Claims 12 and 25 depend from claims 10 and 23, respectively, and are allowable at least for the reasons claims 10 and 23 are allowable.

Applicants thank the Examiner for indicating that claim 1-9, 14-22, and 29-30 and that claims 11 and 24 included allowable subject matters

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at .

Respectfully submitted,



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